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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,079	02/07/2001	Wataru Kubo	P20277	4565
7055	7590	01/19/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			PSITOS, ARISTOTELIS M	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,079

Applicant(s)

KUBO, WATARU

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicant's response of 10/19/04 has been considered with the following results.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1,2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brezoczky considered with Jutte et al and all further considered with Kamiyama et al.

Brezoczky et al teaches in this environment a plano-convex objective lens wherein the side facing the medium is flat – note col. 8, lines 21 plus. This is interpreted as meeting the required single objective lens limitation. With respect to the specifics of the index of refraction, no such specifics is mentioned, nevertheless, Jutte et al discloses a single objective glass lens having an index of refraction of at least 1.6, with a value of rms as 22 lambda. Applicant's attention is drawn to col. 5 lines 15-20 as well as col. 4 lines 65 plus.

It would have been obvious to modify the base system of Brezoczky et al with the above teaching from Jutte et al motivation is to use existing materials for the objective lens, i.e., glass LAL10. Selection of such elements is considered a selection between alternative equivalent materials and predicated upon such considerations such as cost, availability, and reliability.

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Although Jutte et al provides for various NAs, the particular ability of having a NA of at least .7 is taught by Kamiyama et al, note col. 1 lines 12-58.

It would have been obvious to modify the base system of Brezoczky et al – Jutte et al with the additional teaching from Kamiyama et al; motivation is to increase the flexibility of the objective lens so as to be used in the next generation optical recording/reproducing systems, which increase the recording density.

Response to Arguments

Applicant's arguments with respect to the above claims have been considered but are not persuasive.

Applicant's argues:

a) the Brezoczky reference does not specify that the lens is made of glass.

In col. 8 starting at line 21, the discussion of fig. 6 defines the material as having/requiring a high index of refraction, and further gives examples of such materials, which are used as protective coatings for the disc record. Claim 2 specifies a particular value of the refractive index. Hence the examiner concludes that with the above noted requirement vis-à-vis the refractive index value and the secondary teaching from Jutte et al, this argument is not persuasive.

b) the Brezoczky reference does not specify that the lens has a rotational symmetrical shape.

The examiner believes such is evident in the figure, and that if the shape of the lens was not symmetrical, identification of such would be specified. Manufacturing of lens elements in various shapes are well considered well known, and that the path of least resistance is one of symmetry, rather than not symmetrical.

c) the Brezoczky reference fails to disclose the NA requirement. The examine relied upon the teaching from the Kamiyama et al document – as noted in the previous rejection.

d) the Jutte reference lacks particular limitations. The examiner relies upon the Jutte et al reference for what it teaches, not for what it lacks.

e) the Kamiyama et al reference lacks the plano-convex lens. The examiner relies upon Kamiyama et al for what it teaches, not for what it lacks.

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Hence applicant's arguments against the references focuses upon what they lack.

The examiner has acknowledged such deficiencies and maintains the reliance upon such this reference.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to applicant's argument as stated on page 7 of the above response, at lines 8-15 are also not persuasive. Further arguments that the examiner has not provided any reasoning for a haphazardly combination is not persuasive. The examiner concludes that the overall limitations are indeed present in the above documents and has provided reasons for relying upon such teachings.

Applicant can disagree, and as such is noted. Nevertheless, the examiner maintains the rejections as stated above for the reasons of record, and as amplified above.

2. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2 and 6 as stated in paragraph 3 above, and further in view of Official notice and Kiriki et al.

With respect to the process step of claim 3, the ability of producing objective glass lenses by a mold is well known and Official notice is taken thereof.

Furthermore, the ability of having an outer flange for an objective lens is taught by Kiriki et al – see figure 19.

It would have been obvious to modify the base system of the references relied upon above with respect to claims 1,2, and 6 with the above additional teachings in order to provide for a molded glass lens with a flange so as to be retrieved from the mold.

Response to Arguments

Applicant's arguments filed 10/19/04 have been fully considered but they are not persuasive. These claims add no further unobvious limitations for the reasons stated in the previous OA.

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3. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2 and 6 in paragraph 3 above, and further in view of Nakaoki et al.

Independent claim 5 includes an additional magnetic coil on the flat surface of the objective lens.

The above combination of references as relied upon with respect to claim 1 fail to specify such a position. Although Kamiyama et al provides for the magnetic coil, it is not on the surface of the objective lens.

Nakaoki et al teaches in this environment the placement of a magnetic coil onto a flat surface of the sil – see figure 6 for instance.

It would have been obvious to modify the base system of the references relied upon with respect to claim 1, with the additional teaching of Nakaoki et al, motivation is seen as a relocation of parts (the coil structure for a near field sil) from one location to another. Relocation of parts without any unexpected results is not considered patentable. Such relocation of the coil would provide for a narrower information pulse upon the record medium (due to the magnetic field and optical ray interaction) and narrowing the recorded pulse increases the recording density.

Response to Arguments

Applicant's arguments filed 10/19/04 have been fully considered but they are not persuasive. These claims add no further unobvious limitations for the reasons stated in the previous OA.

4. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 and 5 as state above in paragraphs 1 and 3, and further in view of JP 04163510.

These dependent claims (8 upon 1 and 9 and 10 upon 5) additional require a negative, i.e., that the objective lens is not a SIL lens.

The above combination of references are not so drawn, that is although Kamiyama et al relies upon a SIL combination to achieve a high numerical value, the ability of having a single lens with a high value n_a is taught by the JP document to Tanaka et al (JP 04163510).

The ability of limiting the lens to a non-SIL is taught by the Tanaka JP document.

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It would have been obvious to modify the base system as relied upon above in either paragraphs 1 or 3 with the additional teaching from Tanaka et al (JP 04163510), since manufacturing techniques are predicated upon such engineering criteria such as complex design criteria for single lens vs. costs for compound lens elements.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Aristotelis M Psitos
Primary Examiner
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A handwritten signature in black ink, appearing to be 'AMP', written in a cursive style.

AMP